

THE AMERICAN FARMER

ESTABLISHED 1819

SAM'L SANDS & SON, PUBLISHERS.
SUBSCRIPTION, \$1 A YEAR.

BALTIMORE, MD., JUNE 1, 1891.

TENTH SERIES.
Vol. X.—No. 11.

THE GRASSES.

Corn is now planted. The scarcity of provender, both grain and fodder, including under this term hay from whatever source derived, in very many sections turns the thoughts of farmers to the source whence their supply of these necessities is to be obtained, not only for the present, but the future. It is scarcely wisdom to stake our chance of support upon a single crop; but rather by a wise division into two or more to lessen the chance of failure. Nor is this all. No two crops require the same nutritive substances in the same proportion, so that by a proper rotation lands may be practically rested and their fertility preserved, if not increased.

Nitrogen, in its soluble form of ammonia and nitric acid, is the most costly substance used by the farmer in manuring his crops. Yet it is known that those plants styled leguminous, such as the clovers, peas, beans, and the whole family derive most, if not all, of their nitrogen directly or indirectly from the atmosphere, and hence do not need the use of nitrogen manures in their cultivation.

The Agricultural Department in its work on grasses gives the name and food value of 136 varieties, yet in the list of those recommended for meadows and pasturage the list is narrowed down to less than a dozen. Hay is essential for feed where corn-fodder is unobtainable, but reliance seems to be placed on two or three at most, timothy, red clover, orchard grass. Pasturage is, however, the prevailing mode of feeding all kinds of stock, horses, cattle, sheep and even hogs at the present, and so likely to continue for years and in some sections for all time. Then, too, these lands are either meadow like those of mountains and rolling sections, like New England, New York, New Jersey, Pennsylvania and some of the South, as Virginia, Georgia, Kentucky, Tennessee; or levels like most of the South, and almost the entire great West from Ohio to the Rocky mountains. But these sections are different in soil, in temperature and in rainfall, things having the most important bearing on production, as every farmer has seen that has been over his own neighborhood for a single year, let alone for two or three or more consecutive ones.

Not so with our pasture lands, save those that grow clover. We pasture them equally close in wet and dry years; we turn in the stock, not noticing whether the young grass is properly started in spring; we stop not for drought; we turn off only when autumn has killed all vegetation.

Now it may be asserted for a fact, that no grass valuable for forage is a perennial, coming entirely from roots, the famous Bermuda grass of the South not excepted. In this view it is no wonder that our fields are getting bare of the native grasses. Even our Southern marshes, sometimes mowed for their bent and three bent and three-square, will show deterioration in quantity if it is done for more than three successive seasons. There is no chance given for the grasses to head and reseed themselves, save in a most unsatisfactory way, for the best return.

Our purpose is not to teach the best grass for pasturage and soiling, but to give the nutritive value of some grasses little esteemed as stock food, and a few others scarcely known here, that might possibly be introduced with benefit, remarking that our system of cropping, haying, thirding, and rarely going beyond, our land is not suited to permanent pasture. That these where used are too small for dry years and not given such a variety as is best adapted to our mixed system of horses, cattle and sheep on the same plot. No animal pays better for frequent changes than sheep.

The albuminoids are the main nutritives in all foods, hence we shall confine the list to them. We give the percentage of albuminoids:

Rep top, 13.9; timothy, 14.15; orchard grass, 15.97; meadow fox-tail, 15.73; June grass, Kentucky blue grass, spear grass, green meadow, R. I. bent, 19.88; English blue grass, wire grass, 12.69; Schrader's grass, rescue grass, 17.05; brown grass, 15.78; velvet grass, velvet mesquite, soft grass, Salem grass, white timothy, woolly soft grass, Yorkshire white, 12.37; evergreen grass, meadow oat grass, tall oat grass, 14.66; pigeon grass, 17.02; sweet vernal grass, 13.30; sheep's fescue, 14.91; Italian rye grass, 13.10. All grown in Department grounds, Washington, the percentage being those of them when richest in nutriment, which was not always at same stage of growth. Yard grass, crow-foot, crab grass, wire grass, 13.60; crab grass, 23.13; red clover, —; Texas millet, 5.48; cat-tail millet, —.

The list needs extending. We close with a single remark, that if timothy, now so highly prized, from its wild state has grown into so highly a prized forage plant, why may not our native crab grass, so much richer in its wild state in the nutritious substances, be made by cultivation and judicious selection of seed of far more importance to the farmer, living on higher lands, than where timothy flourishes.

CORN FOR YIELD AND FOR FOOD.

The Experiment Stations are doing some very valuable work, if the press of the country will only spread it before their readers; not the agricultural ones, not the weeklies, not the religious ones, but the entire press. There is not a city paper that has not country subscribers, not a single State that has an Agricultural College, or Experiment Station whose "Reports" or "Bulletins," however generously distributed, ever reach more than an insignificant minority of the farmers of the State.

We ought to have a nation of reading, thinking farmers fully educated up to the latest discoveries in their pursuits, just as bankers, manufacturers, engineers, physicians are, not only through their journals, but through their annual associations where their very brightest men take both pleasure and pride in making public their discoveries.

These were our thoughts when the Experiment Station Record for April fell into our hands. For years a somewhat general, if not critical, notice of the hardness and superior strength of corn and fodder-fed horses, in proportion to weight, had been attributed exclusively to their diet as the more nutritious, yet while true, generally, we failed to catch on to the true reason.

In all corn growing sections noted for yield per acre close planting is the rule and not the exception.

Thus in Connecticut some experiments showed "more dry matter in flint corn when planted a foot apart; in dent when two. The proportion of sound kernels followed the same rule so that when either crop was thicker there was the most soft corn."

"The closer the corn the more fodder, and within the limits above the yield."

"It is a striking fact that the percentage of albuminoids in the dry matter form the individual waive plant regularly increased as the stand of plants was thinner."

This question then of planting becomes one of great importance, shall we plant for quantity or quality? Taking into calculation our soil and the purposes for which we raise, market or home use, in which is there the more money? Will increase of yield compensate for inferior quality? Many farmers complain some years that even an increase of quantity does not keep their stock in condition, usually attributing it to the fodder or hay used. We thus plainly see that the corn is the important factor. In most of the country corn is fed to horses in the

ear, so many for a feed. If so, an unreliable guide, and no better if fed shelled, or ground; there is a deficiency of food-stuff. These points lead to one of two practical conclusions: Experiment with varieties until you hit the one richest in quality that will suit your soil best; then follow it up by trying to secure the proper distance apart to get both. Or, plant your crop at different distances as your demands for a sale or home use may require. In their use may be found the progressive farmer.

H.

ENSILAGE AND BEETS.

The Baltimore Weekly Sun of February 7th, last, contained an article on Ensilage, by President Alvord, of the Maryland Agricultural College, which is of value as a contribution from an experienced ensilage as to its value.

I was, however, surprised at one statement which President Alvord makes. He says: "I have found ensilage no better than roots, but in most cases just as good, and always much cheaper."

In regard to its being much cheaper than roots no one, who has had experience in growing and feeding both, will be disposed to dissent. But I seriously object to the statement that the feeding value of ensilage is no better than roots. In fact, all my experience, and all that I have read upon the subject, show that corn ensilage has a much higher feeding value than roots, pound for pound. In my own experience there was no reasonable comparison between the two. At the New York Station (Geneva), in 1890, some experiments in feeding roots in comparison with ensilage were made by Prof. Emory (now of the North Carolina Station), showed that when cows fed on ensilage were changed off on to the same weight of roots, they not only consumed a larger amount of hay, but actually fell off in milk production.

In 1886 I sowed my last crop of mangolds. I had been a strong advocate of roots, and although convinced of the value of ensilage, I still could not entirely give up the roots. That year I planted a twenty-acre piece of very fertile river-bottom land in corn for ensilage, with the exception of a rectangular piece measuring exactly two acres, which was devoted to mangel wurzels. The mangels had, although the soil was fertile, a good dressing in the drill of a high-grade ammoniated fertilizer, to give them a good send-off. The crop was good, both of beets and corn, but the cost of growing and harvesting the two acres of mangels

was equal to the cost of the remaining 18 acres of corn. (No guesswork here, but actual figures). If the two acres had been in corn I would have had ensilage enough from the piece to have fed fifty cows one month at the same rate that the remainder of the field yielded. The beets made nowhere near the same weight, and in feeding took nearly double the quantity for as good results as the corn ensilage. I have never raised any beets since then.

English and Scotch farmers are the men in this country that keep people growing roots at a loss. These men come here with their old-country notions about roots, and totally ignorant of the great capacity of our corn-plant. They are the most conservative of mortals, and will keep on growing roots year after year in spite of the fact that corn can be grown at a tithe of the cost. And some of them write for the papers extolling root culture, and seedsmen find a profit in selling beet seed, and so the humbug in American agriculture is kept up. But root culture for stock feeding is rapidly passing away wherever corn thrives in this country. A short trial soon satisfies an American farmer.

I would like to note here the fact that we have at last, for the South at least, the most perfect of all silo covers—cotton-seed hulls from the oil mills. Of course they are not available outside the cotton belt, but here they are cheap, and as a cover are simply perfect.

W. F. MASSEY.

Raleigh, N. C.

THE SOURCE OF NITROGEN.

The question between Prof. Massey and X., as to the source whence corn derives its nitrogen, it seems to us is one capable of solution in a mathematical way. Corn, according to Mr. Gregory, requires 2 per cent. of ammonia; yet there are many fertile soils that contain 1 per cent. or less—where do the crops get the residue? Where land grows 40 to 50 bushels to the acre there is at least 35 per cent. of nitrogen, but such a crop takes out 60 to 70 bushels of nitrogen. Where does it get it?

It seems to us that there is a mechanical difficulty in the way also. In an acre there are 4,900 square yards. Then to get at 1 per cent. of nitrogen in the soil the roots of two stalks or one hill would require to spread over every inch of surface—a thing they never do. If we suppose 35 per cent., as the agricultural chemist, Prof. Wiley, estimates, then we are short about as much as the soil contains. If we estimate that corn roots penetrate only 4 inches deep and recollect that chemists take their specimens a foot square and one deep the difficulty only increases. In whatever way we look at it there seem difficulties. If the atmosphere should be the source then the application of substances to the soil for which nitrogen has great affinity would be a cheap way of manuring our land.

Nitrogen has great affinity for potash and soda. How far the olden custom of burning all the timber on the lands as they cleared them and how far inland the effects of "the salt sea foam" may be felt, are ques-

tions not as yet answered. Soils in Washington county contain .25 per cent. of potash and .16 of soda. On the Eastern Shore potash and soda are combined in the State Chemist's Report and range from .04 per cent., the lowest, to .17, the highest.

So, without entering into the controversy about corn's source of nitrogen, we simply remark that neither the soil nor the atmosphere seem to have much available atmosphere.

A LOOKER ON.

GRAIN VS. STALK.

Perhaps the high reputation that stable manure has acquired is due almost, if not entirely, to its great stalk growth, so prone are we to associate a robust, vigorous stalk in all the cereals with a first-class grain production, and this is true within defined, if not expressible, limits. Horticulturists and botanists have long since sought to build up a variety of trees and plants in which stalk was made to play an important part, it having been found by dearly bought experience that there existed a direct ratio between stalk and yield, but, also, that certain manures, when applied, accomplish this purpose far better than others. Wheat and corn have definite heights for best yields, and certain fertilizers produce them. Have we sought to grow the best varieties of any cereal, like market gardeners have cabbage and tomatoes of a stalky kind for good heads and great yield of fruit.

The following table, from Pendleton's Scientific Agriculture, gives the percentage of well-known ingredients in grain and stalk of common cereals:

	CORN.		WHEAT.		OATS.	
	Grain.	Stalk.	Grain.	Stalk.	Grain.	Stalk.
Phos. Acid.	84.7	15.3	89.6	10.4	83.2	16.8
Potash.....	4.34	56.6	73.1	26.9	42.0	58.0
Lime.....	20.5	79.5	28.0	72.0	31.6	68.4

As usual with old chemists, nitrogen is ignored.

The point is well illustrated in the superior fodder growth of Southern corn—as tested as a silage crop in the North. The subject has not been studied as the merits deserve. For all such experiments as will solve it we must look to our Experiment Stations and Agricultural Colleges rather than our farmers, so prone to follow old-time custom. L. E.

FRUIT PROSPECTS AND ITALIAN OR SCARLET CLOVER.

Much speculation is still rife among owners of peach orchards in this county as to the ultimatum of the very low temperature which prevailed on the morning of May the 6th. Mercury registered thirty-four degrees (34°) before and at sunrise, completely blighting the new and tender growth of many kinds of trees, in many instances to a distance of ten feet from the ground—almost everything at a higher altitude than ten feet escaped injury—young oaks of different varieties, hickories, persimmons, sassafras, chestnuts, walnuts, holly,

magnolias, grape vines, etc., etc., the new growth on some of which varied from two to ten inches in length, present the appearance now of having been exposed to flames of fire, scorched and brown—withered—dead.

The memories of our oldest people here fail to recall a parallel. The "scare" among fruit growers was unanimous and graded in intensity, according to the temperament and self-control of the individuals. Conclusions in many instances were quickly arrived at involving a surrender of fruit prospects in toto. Twigs and branches bearing peaches were collected from various parts of various orchards, and with mournful tread carried to the nearest town for exhibition and inspection of village wisdom, where premature funeral services of many long and tenderly cherished hopes of the "horny handed" sons of toil were placed upon the "free list" for the special encouragement of peach growing. Strawberry growers, too, enjoyed to some extent special recognition and favor of a similar brand, from their town and village sympathizers—even the local newspaper editors, in many instances, liberally dispensed consolatory scintillations, free to the mourners of "dead prospects" (?) Partisan political managers are now industriously endeavoring to concoct a combination with "Jack Frost" to chill and freeze the rapidly increasing prospects of a large crop of "Farmers' Alliance votes," but with the latter, as with the peaches and strawberry crops, the funeral services are in danger of being "pulled before they are ripe."

Of course all the blossoms of strawberry plants that were open and exposed at the time of the "freeze" were killed; and, in low, flat land, even the tender green berries were injured, notwithstanding ripe berries are being picked and marketed—berries, too, of fine size and quality, such as bring cap-sheaf prices in the New York market.

The puzzle with the peach crop is the condition of the primitive or embryo seed, many of which, when the little peaches are cut in two, show discoloration of the seed, varying from very light brown to black.

"Will these all drop in June?" "That's the question." Should all drop that are to a slight degree thus affected, the crop will be materially reduced; though in some orchards there are certain varieties over-loaded to such an extent that fifty per cent. dropped or removed would be to the advantage of the trees and their owners. Location, surroundings, character of land, etc., as well as the general hardness of varieties and age of trees, are this season contradictory in themselves, as regards bearing. Truly, it does seem that there are some things "past finding out" in fruit growing; or otherwise, there is a vast sight yet to learn.

Apples, pears and plums have sustained no visible injury from the frost, and although the blooming of the apple occurred on the "light or full of the moon," there are most gratifying prospects of a fine crop. Do you ask "What has the moon to do with the blossoms of an apple tree?" Why nothing, in the opinion

of the writer. Still it is an undeniable fact that there are intelligent people all over this great country who firmly believe that there will be but few apples when the trees bloom in the "light of the moon."!! Will moon worshippers please make a note of the behavior of the apple this year?

We are just finishing up this week the turning under of Italian clover (crimson or scarlet clover) in peach, plum and apple orchards. Some places where the land is good, it reached to the bellies of the mules and stood as thick as it could stand—a perfect blaze of red heads—rolled under with chains attached to the plows. I notice with regret that Henry Stewart, in answering the inquiry of a Marylander in the Rural New Yorker, relative to best green manures for the orchard, gives it as his opinion that this Italian or Scarlet clover is greatly over-praised, and expresses doubt as to its value in this State for that purpose. This is indeed a great surprise to me, as I regard Mr. Stewart as a very conservative and safe authority generally on matters agricultural. If he could see the immense growth of this clover in this county, and the effects produced on a peach orchard, where a crop was turned in last season, I feel satisfied he would change his advice to Maryland orchardists. In brief, its value here for early pasture, for hay, and for a green manure, is beyond computation.

J. W. KERR.

Denton, Md., May 20, 1891.

CRIMSON CLOVER.

Crimson, Scarlet, Italian or English clover, as it is variously called, is beginning to create quite a sensation among the farmers of the Eastern States where, its merits are known and appreciated, as an early forage, or green crop for turning under as a preparation for corn or other crops. Only a few years back "Crimson Clover" seed sold at sixty cents a pound among florists, as a flowering plant, pretty enough for any flower bed, and I know of nothing in nature more beautiful and striking to the eye of the lover of rural sights than a well set field of the clover when it is in full bloom. It can be seen for miles, like a bright blanket spread over the field, and continues to bloom much longer than the common clover. The base of the blossoms (which average 2½ inches in length) are deep crimson, and the tips bright scarlet; the two colors blending most beautifully together.

Its time of blooming the present season with us here in Anne Arundel was about the first of May, but it was not at its best until several weeks later, when upon cutting it for hay I found it a superior clover for that purpose; the only difficulty being usually a lack of bright hot weather at this early season for curing hay. Stock of all kinds are as fond of it as of other clovers, and the second crop seems starting vigorously where mowed or grazed. A field of crimson clover upon a blowing sandy soil, but which had been manured for melons the previous year, grew to an average height of 20 inches, while a field belonging to a neighbor upon which grew the

common clover, did not approach it by several inches, although his land was heavier and more suitable for clover. Its greatest merit consists in its being a winter clover. The past winter it showed up green and thrifty after every mild spell, and seemed almost proof against freezing weather. The claim made for it by its advocates, of its ability to grow upon land too poor to grow other kinds of clover, was well borne out in my experiment the past season. This fact encourages me to believe it a veritable God-send to many run-down farms of the country, upon which the common red clover fails to set.

Crimson clover is an annual, and should never be sown in the spring. Any time in August (in fact I sowed mine the first week in September) will do for seeding, and if possible this should be done upon well prepared land, although upon the Eastern Shore and Delaware many sow it in their corn fields and peach orchards at their last working, and get a good stand thereby. It is claimed by those who have experimented, that for turning under green it is as valuable as a liberal dressing of manure or artificial fertilizers for an orchard. Owing to the large size of the seed it requires at least double the amount of seed for an acre compared with red clover, but makes amends for this fact by turning out double the quantity of seed. Now, agreeable to the editor's request, I have endeavored to give you a true description of this valuable new clover, and as some of his esteemed correspondents have done me the honor of calling me "conservative" in my writings for the "Old Pioneer," I trust that your readers may not accuse me of exaggerating, but will sow some of the Crimson clover either as a field crop or in the flower bed and test it for themselves.

Respectfully, R. S. COLE.
Harman's, Md.

AGRICULTURAL REPORT FOR 1890.

Those who have seen the Agricultural Reports grow from an insignificant part of the Patent Office Reports to the portly volume of to-day, and the office becomes important enough to assume a Cabinet position, will have seen one of the marvelous growths of the American people. And while the head is one of the President's advisers, the office has not assumed the position it ought to occupy. To-day, as of yore, it plays "second fiddle" to the treasury, just as that has usually done to the manufacturers. Clay, Webster and Carey, more than a half century ago, looked forward to the time when these should "stand alone" and not need the fostering hand of government, but the legislation of to-day is thought by many to afford indisputable evidence that the same class of manufactures are still in "their swaddling cloths," still "unable to stand alone," still asking for government protection, and that other people should contribute to their support. In fact, that they are "babies" now as then, although the country has grown to sixty millions, and the very best of labor machines, such as the world has never seen or known hitherto, has reduced the cost of manufacture to a minimum.

To-day, and for years, the farmers' products have held the balance of trade in our favor, prevented the exportation of gold and silver, and covered the country with a net of railroads such as no country can boast of. Yet this "horse leech of protection" has eat up our commercial marine, once our pride and boast, and has increased the farmers' expenses, until, to-day, in our Atlantic and New England sections, grain has become practically impossible to raise, the wages paid for so doing being more than the crop raised would sell for. This state of affairs started the Grange; it has inaugurated the Farmers' Alliance; it bids fair in the near future to see an uprising in which taxes shall not only be equalized, but their burden shifted to shoulders that have never known their weight, and when others will have to practice a portion of the same economy that they have been so lavish of preaching to those that raised their bread and grew their meat and vegetables. Jackson said: "The blessings of government, like the dews of heaven, should descend on all alike," and we much mistake the temper of the times if Western brawn that under Grant took Vicksburg, and carried Sherman to the sea, and enabled Southern muscle, although in a hopeless minority, to hold successful battle with the serried hosts of the best fed and equipped armies the world has ever seen, be not found side by side in that peaceful battle of the polls for self-protection and the redress of common grievance in the not distant future.

Then with an over-taxed class, with poor crops in many sections for two years, and another far from promising in outlook, any and everything that promises to add certainty to their yield of crops, whether of cereals, fruits or plants, is to be cordially welcomed, and such is Secretary Rusk's report for 1890.

The Irish potato crop is large and in some sections has "rotted" badly. For this the Bordeaux mixture has proven a specific when applied when the leaf gives signs of its appearance. Apple scab yields to it if the blossoms are sprayed when they make their appearance, and two or three times after. Grape rot is prevented by its application, and the ravages of the curculio on the plum and on the apple stayed. The same may be said of the codling moth, another apple pest. When used on grapes a saving of from 400 to 500 per cent. was made, and trees may be effectually protected at a total cost of less than 3 cents per tree.

For peach yellows, the doubt about its cause has not been dispelled, nor has any remedy for it been found. Perhaps the Delaware Legislature, at its late session, hit upon the best one: Dig up and burn every infected tree.

In Illinois, drill planting, 1 grain every 12 inches and not over three inches deep, gave best yield with yellow corn in north of State, and indifference of varieties elsewhere. In Ohio the yellow varieties have done best, closely followed by the whites.

In wheat in Ohio a seeding at the rate of 7 pecks per acre has done best, closely followed by the 5 and 6 peck rate. And the red wheats have out-yielded the whites.

For the "stinking smut" of wheat the Jansen method of immersing the seed wheat in hot water for 15 minutes has proved very efficient.

In Maryland a Department corn with the euphonious name (?) of "Angel of Midnight," has proved ten days to two weeks earlier than usual varieties. Connecticut seed leaf tobacco seed turned out well. New Genessee White, Fulcaster, Improved Rice, and Velvet Chaff wheats ranked in value as named.

The source whence corn gets its nitrogen is unexplained. It has no "nematodes, or root tubercles," as have the legumes.

Grow legumes that you may have a forage rich in nitrogen, a rich food for stock, and a rich manure to put back on the land to keep up its fertility.

The rose chafer, such a pest of the rose bushes, and sometimes extending its ravages even to peach trees, is effectually disarmed, if not killed, by being sprayed with London purple mixed at the rate of 1 lb. to 150 gallons of water. Dusting the plants with air-slaked lime, or gypsum, is a protective, and so is the use of pyrethrum.

To escape danger from Hessian fly, wheat in the wheat belt ought to be seeded after 1st of October.

For plant lice use H. O. (tobacco) powder in mid-day.

Arsenites of ammonia, as ordinarily diluted, do not injure foliage of squash, cucumber, potato, plum, cherry, box elder, apple, beans, grass or clover, and is as an effectual insecticide as Paris green and London purple.

Among the strange notions of the veteran statistician "is one of the profuse, even wasteful use of the food products by the people of the United States," in comparison with that of European nations. When Mr. Dodge shall have demonstrated that empty stomachs give a higher physical and mental aptitude than those that have full ones it will be time to discuss this question. It is generally conceded that our extra well-fed armies in the civil war was their strength and gave them their well-earned victories.

The whole volume lacks that completeness of detail that many of the former ones had. There is too much reference to unobtainable bulletins, etc., to render it perfectly satisfactory as a book of reference which it ought to be.

The communication of Texas fever has been traced to "ticks," and inoculation possible as a preventive of hog cholera and swine plague; the one the typhoid fever, the other the pneumonia of swine. Sugar beets grow best where the thermometer averages 70° F., during growing season, with a monthly rainfall of 2 inches.

Sorghum bids fair to prove remunerative where alcohol is used as a defecator for both sugar and molasses. In Maryland, farm wages with board has changed very little, being \$12.00 per month in '69, and \$11.25 in '90.

Scarcity sends up prices more than a full crop depresses. Thus a fall of 522 million of bushels in 1881 sent up the price of corn 24 cents; an increase of 522 millions the next year sent it down 15 cents. Yet a

variation of 12 bushels per head will cause these changes.

As there are only 400,000 copies of the report published to teach 8,000,000 farmers, the only way to reach them is to abstract its contents for agricultural journals, in the hope that its valuable truths may meet a larger number of readers: A. E.

ORCHARD GRASS.

Dr. Ellzey, in his notes on Howard county Farming, gives orchard grass the highest place in the list of grasses both as a pasture and hay grass. He says: "I speak from ample practical experience when I maintain that this is the most valuable of all the grasses we possess." That sentence proves that his "ample" experience does not include the sale of orchard grass hay in the Baltimore market, for if he had tried to sell it there in competition with timothy he would have found that as a money crop it was out-ranked by timothy. And if he has fed the hay to horses and cows and they preferred it to timothy, his experience is just the opposite of mine. He also says: "It is much to be regretted that certain theoretical writers have, without practical observation, written it down with perverse ingenuity and persistency." Here again my observation is just the opposite of the Doctor's, for I have noticed that the "theoretical writers" have invariably written it "up" with all the "perverse ingenuity and persistency" they were capable of. Orchard-grass is the easiest grass to praise that I know of; it has so many "promising" traits, it is like a politician before election, full of promises; and like the politician after the election, it is 'way behind in performance. When you sow it (after having read the encomiums passed upon it by certain theoretical writers) you look forward to a permanent pasture or meadow, for it is said to make a good sod, or as Dr. Ellzey puts it, "If sown evenly and kept close grazed or mown, both grasses [that is, orchard grass and tall meadow oat grass], will make a regular turf." It will, in one sense, for the tussocks of orchard grass will be dispersed in regular order over the field—but at a considerable distance apart—and, as Dr. Ellzey so truly says, "the extreme abundance of the primary leaves, which fall down in mats and smother everything under them except the central tuft." The Doctor has described the situation exactly. How these primary leaves which fall down in mats will smother out every other kind of grass, and when you mow the fine-looking meadow the machine cannot reach these primary leaves because they have fallen down in mats, but it cuts the "central tuft" with a few secondary leaves and some wire-like stalks surmounted by heads that, unless you have begun the erecting a little earlier than the Doctor recommends, will contain enough seed to spoil any manure for top-dressing that it may happen to get into. As for the aftermath, it makes a better hay than the first crop, because it has no stalks in it, but the quantity is surprisingly small and as compared with clover hay for feeding it is not to be mentioned.

For the pasture-field, orchard grass has its place; it is early, stands a drouth, springs up soon after being grazed, and if closely grazed will all be eaten; if not closely grazed the seed-stalks will not be eaten, but when the seed gets ripe the cows and horses will eat the heads, being careful not to bite off any of the stalk. I once read an article on orchard grass by a man in Tennessee. I didn't know whether he was a "theoretical" chap or not, but, as he praised orchard grass a little higher than anyone else ever did, I suppose, according to Dr. Ellzey's standard, he was a practical man. He said, among other things, that in growing orchard grass for the seed, after the seed was thrashed out, the *straw made excellent feed for horses!*

Dr. Ellzey says that after June 10 the hay "deteriorates with extraordinary rapidity." It does, but think of allowing it stand until the seed is ripe, then thrashing out the seed and claiming that the *straw* makes good feed! I would not advise anyone to grow orchard grass for hay, for I honestly believe he will be sorry he ever sowed the seed. For pasture it may do, but its usefulness extends no further in this climate where we can grow timothy, which makes a far superior hay both for selling and feeding, and which will outyield orchard grass and outrank it at every point except for pasture.

A. L. CROSBY.

Rockland Farm, Baltimore co., Md.

REMINISCENCES—II.

The young man that tried a life on the ocean wave found it rather damp and concluded to try farming and move the earth to suit him. After noticing how his neighbors managed their affairs, came to the conclusion that capital was the leading implement in smooth farming. Having a field well set in nigger-head stone, that figured on the wrong side of the profit and loss account, he talked it up to a citizen and let his eloquence go on a beautiful site there was on it for a summer seat. The argument closed, the bargain was made, and preparations to build began. The house to be built of stone, to relieve the ground from obstructions in cultivation, \$10 was invested in drawing by an architect, with plans, specifications and a cupilo (which has since been removed and replaced by a mortgage). The architect's estimate was \$2,500; when finished the bill footed up, without ground-walks, shrubbery and flower beds, \$6,000, which fact took the owner sometime to realize; but he consoled himself with the thought that he could raise crops that would reduce it, but found on giving orders to his men in the morning, before going to the city, that they did not carry out his instructions, and the only thing they did promptly was to collect their wages Saturday evening and visit the village. His figures showed him that kind of farming did not pay. As soon as he found a customer he sold out at loss of about \$3,000. Owner No. 3, on taking possession, went for fruit and flowers on a large scale and gave them his undivided attention. He dammed

the water into a lake, laid off walks and planted trees from Norway and Texas; buried the big rocks and shaped things up, but the first chance he got he sold out at a loss of \$4,000. Owner No. 4 found there was nothing fixed right on the place; he made the old boards and shingles fly and rebuilt the whole affair, moved out the side of the mansion and put in all the conveniences of a city. He had five acres in lawn as smooth as a floor that kept three men busy pushing a lawn mower, raking and rolling the walks. Things were looking lovely, but he did not seem to be happy and sold out at an increased loss next summer. Owner No. 5 appeared with carpenters and lumber and the sound of the saw and hatchet were heard until he moved to the city for the winter. Then next it was sold again, and when owner No. 6 appeared he appeared to be sold too. One season of rural life was enough for him when he turned it over to No. 7, whose performance has not yet begun. But then, you know, men are only boys of an older growth, building up and pulling down, trying to get suited and get ahead of each other in making a big show. It is those to the manor born that live out their days in peace on the farm and can lie down in the arms of old mother earth when their natural time comes, with the assurance when awakening to find a mansion already prepared for them. When he was a young farmer he liked to tell what he knew about farming, and it did not take him long to do it. Now he is old, if he could find out how much he don't know about farming he thinks it would make a book about the size of Webster's unabridged Dictionary.

JOHN E. CAKE.

VETERINARY DENTISTRY.

Within comparatively few years a new profession has sprung into existence—that of veterinary dentistry. Until a few years ago all that was deemed necessary was to take a hammer and ten-penny nail and knock off "wolf teeth" to keep the horse from going blind; but now teeth are extracted not to keep the horse from going blind, because they do not affect the animal's eyes more than does any other tooth, but to keep a bit from pulling and loosening them, causing the horse to have a sore mouth. As far as similarity of structure and kind of food extend, horse's teeth are subject to the same deteriorating influence as the teeth of man. They may decay and expose the nerve enough to cause toothache, as is sometimes seen when a horse takes a drink of cold water, causing him to throw up his head or hold it sidewise until the pain is over. Sometimes a tooth becomes ulcerated, the accumulated pus often causing the jaw bones to bulge out; or it may break and discharge either through the nostril or upon the outside, forming a disagreeable running sore.

A horse's tooth is not covered on the outside with enamel like a man's

tooth, but the enamel is folded through the substance (dentine) of the tooth. The enamel, being harder than dentine, is not worn away as rapidly, and presents a roughened grinding surface necessary to properly masticate coarse food. These toughened surfaces should not be filed off unless upon the edge of the tooth when liable to cut the tongue or cheek.

As horses' teeth are worn away by contact with opposite teeth, they gradually grow out of the jaw bone until, in old horses, the teeth may simply rest upon the jaw, being held in place by the gums. If one tooth should be broken out, the opposite tooth is very liable to grow until it becomes long enough to strike the jaw opposite and produce a very sore mouth, making it difficult to eat.

The results of diseased teeth are often serious and always important. They are sometimes the cause of indigestion and colic, because the food is not properly masticated. Sometimes mastication is so painful that a horse will scarcely eat at all, and becomes gradually emaciated. When the teeth are diseased, the saliva usually has a very disagreeable odor. Diseased or abnormal teeth are often the cause of horses pulling on the bit, or upon one line, or carrying the head sidewise, and of other faults which can be remedied or removed by a good veterinary dentist.

Dental work, properly done, does not deceive any one regarding a horse's age, "bishops" work, done by unprincipled men with a view to deceive, being easily detected.

Colts, until five years old, should have their teeth examined quite often. After their teeth are all shed at five years old, every year or two is sufficient.

After a nice job of dental work that adds to the health, comfort, and usefulness of the animal, it would seem permissible, or be gratifying, at least, to "look a gift horse in the mouth."—Dr. L. N. Mayo, in *Industrialist*.

POULTRY YARD.

ITEMS OF SUMMER MANAGEMENT.

Do not hatch out more chicks than there are suitable coops for, or than you can give sufficient nourishing food to keep them growing rapidly from now to maturity. Failure to make poultry-keeping profitable, is generally caused by attempting too much. If you have very little experience in raising broilers, and wish to establish yourself in this branch of the chicken business, it would be better to begin by raising only a few hundred at first, and then to increase the number as you learn the details of management and create a profitable market for your stock. The profits will be proportionally greater upon a limited number of chicks well cared for, than upon a larger flock which has suffered from neglect. If, on the other hand, you have been unsuccessful with your sitters, and have only a few chicks to show for the spring, it would be better to delay bringing out any additional clutches until August or September, as eggs

set in July seldom hatch well, and the chicks coming out during that month do not thrive, while later you would be more fortunate. Then too, the pullets hatched in the autumn would mature and begin laying the following spring about the time the early ones were falling off in their prolificness, and would thus cause the supply of eggs from the flock to be more uniform. In order to have eggs in the fall when the old fowls are moulting, and during the winter months, select the most promising pullets from the early broods.

At this season the fowls should be given at least one light feed of grain a day, even if they have a large range to prevent bowel trouble, as the hens running at large will consume a great deal of green fruit and immature vegetables, and, unless this supply is rendered wholesome by feeding them more nourishing food, the digestive organs will become deranged and evil consequences will follow. Market all the chicks you do not intend to keep for the general flock as soon as they are large enough; be sure that the fowls have plenty of clean drinking water, and do not depend upon any stagnant pools there may be about the premises; gather the eggs regularly, hunting up all the nests concealed in the high weeds or other out-of-the-way places; do not think because eggs are quoted so low through the summer that they are not worth collecting; the large number of them to be obtained from the hens at a very small cost will pay well for all the labor and expense incurred.

Some of the eggs might be preserved for winter use. They can be kept for several months, if perfectly fresh ones are used, by putting them in a strainer and scalding them slightly, when they are to be packed in salt and kept in a dry, cool place. If it is desired to keep them for a longer time it would be better to make a pickle for the purpose. This can be done by dissolving two quarts of lime, one quart of salt, and three ounces of cream tartar in eight gallons of boiling water. After the solution has been allowed to cool and settle, draw off the clear liquid into another vessel and immerse the eggs in it, taking care that all are covered; lay a cloth over them and pour the dregs upon it. If the pickle becomes low at any time add more water to it.

If it is intended to build yards for the fowls next season, the site for them should be graded now and seeded with a thrifty grass. Orchard grass and white clover are difficult to run out when once started, and would therefore be suitable for the purpose. A good turf could be obtained by sodding and then manuring it heavily; but if there is not a fairly luxuriant growth when the yards are built, it will be difficult to obtain one afterward. Perhaps your plans include a new poultry house; if so, build it this fall, when the ground becomes thoroughly dry; many put off the erection of such building until spring, when the earth is saturated with moisture; consequently the floors remain damp for several years. Remember, a tall building will be much colder than a low one in the winter time, and that ventilation may be overdone.

H. R. STEIGER.

MORE INCUBATOR EXPERIENCE.

We will give the record of another hatching.

One hundred and sixty eggs were put into the machine April 20; thirty-eight were tested out, leaving 122 possible to hatch; one of these was afterward accidentally broken. Of those left in, 76 were Plymouth Rocks, 4 light Brahmas and 38 crosses of Light Brahmas and Plymouth Rocks.

70 Plymouth Rocks, 6 Light Brahmas, and 33 of the cross, hatched, or 90 per cent. of the fertile eggs—of those failing to hatch 9 were mature, and 3 not quite so.

Heat kept at 102° as nearly as possible, and no sprinkling practiced.

We must protest against the advice to deluge the eggs at any time during the hatch, as it is entirely unnecessary or a positive detriment.

Let us have a record of hatching from your correspondents who recommend this practice, with some reason for it, that can be justified by experience.

Neither can we agree to the advice to have the heat at 105° at any time, nor the increase or the decrease; careful experiments are on record where the temperature of hens has been taken at different hours during the hatching period, and the average heat is said to be not over 103°; so, if the thermometer, with bulb on a fertile egg, marks 102°—the tendency of the heat to increase with growth of the chick, will if kept at that point, furnish the desired amount for a successful result.

INCUBATOR.

INCUBATION AGAIN.

Poultry raising, whether with hens or incubator, to be successful, requires patience, judgment, and care. Should you try hens there are scarcely two that sit alike, or can be handled in the same way, should you have occasion to examine their "hatch," a thing usually necessary to see that no hen has laid to them, or that none have been broken from two of the sitters seeking to occupy the same nest, a propensity that some hens are given to. A worse one is that of some hens to quit their nest from no known cause, and at no given season, whether the first, middle or last of the setting season.

After the chickens are hatched the troubles multiply. Some hens are proverbially hard to get in their coops; others are indifferent to which one, so it is a coop, much to the worry of their brood, that soon acquire a knowledge of this kind, and are unwilling to go elsewhere. Others have decided hostility to every chicken save their own, picking and fighting them without limit. Then again there is a hostility to colors, generally black or white, so that they will kill any of the objectionable color that comes near.

From all these cares and annoyances an incubator and its brood is practically free. Three times a day, at 6, 12 and 6 o'clock, are all the visits an incubator needs. Morning, noon and night to turn the eggs; morning and night to fill your lamps, should you use them, and in the former to sprinkle the eggs. At noon to turn and cool them down; the latter a troublesome job if the weather

is warm or your incubator room hot, a thing sometimes occurring in May.

After the chickens have been hatched and accustomed for a few days to a brooder there will be found very little trouble to collect them under a box or coop, as they will generally go together, and come easily when called, although turned loose in the open yard.

If the feeding coop is placed with its end to the roosting coop (brooder) the chickens will soon learn to go under it, and will need only stopping up to keep them warm, and to prevent their coming out too soon in the mornings.

It may be added that an incubator may occupy but a few feet in the kitchen and hatch as many eggs as twelve or fifteen hens, thus allowing them to keep on laying and reducing cost of their keep.

We use a hot air incubator, and find that she compares fairly well in her out, put with our neighbors' hens. Frequently purchasing eggs from the stores and from neighbors for incubator purposes, we have noticed little difference in the hatch. Seasons seem to have the most to do with it in some unexplained way. All eggs that are carried any distance should be rested at least a day before being set.

For the above reasons we have for years discarded hens as hatchers.

H.

TURNING EGGS—INCUBATORS AND HATCHING.

Every observer that has noticed a hen going on to lay, a setting hen going on her eggs after having been off, or at different periods of the day when setting, has noticed their constant custom of changing their positions. Whether this arises from their becoming uncomfortable, from heat, or from the relation to their body, or from an instinctive knowledge that it is necessary to their successful hatching, is a disputable question. Egg-sellers contend that their turning is necessary to keep them fresh; that if not done the yolk will settle to one side and cause the more rapid decay of the egg. Now we know that the white forms the entire chicken, and that the yolk simply furnishes the food (nourishment) that goes to support the embryonic chicken until hatched, and for a few days after. In this sense the settlement of the yolk to one side, and its superior weight, may divide, or may press together injuriously the white so as to produce a malformed chicken. The experiment of M. Debroste communicated to the French Academy of Science seem to show that the immotility of the yolk from the time of laying to hatching has much to do, if not all, with the egg's fertility. Incubator men differ as with reference to the number of turnings eggs require; some think they ought to be turned every 5 or 6 hours, others that twice a day is sufficient. Perhaps the difference is due to the completeness, or the reverse, with which it is done rather than the number of times. The moisture given them is a prime factor, because the fresh moist air must reach every egg under a hen with more or less completeness but can not do so in an incubator.

Next comes the heat required; that obviously depends on the thickness of the egg-shells, some hens and some breeds having thicker shelled eggs than others. As incubators differ in construction, in ventilation, and consequently in amount of cold moist air admitted so in the amount of heat required for a successful hatch. Mr. Bain, of the Improved Common Sense, says 105°; Mr. Jacobs says 107°, if not kept up too long; Mr. Williams, of the Monitor, from 101° to 103°; the Messrs. Von Culin, of the Simplicity Hatcher, from 100° to 102°, although 104 will not hurt; Mr. Craig, of the Folding Incubator, 102° or 103°. All of these seem predicated on the kind, and, it may be, the freshness of the eggs used. The Messrs. Von Culin would not have an egg over five days old, yet it is well known that a hen will steal a nest out and hatch every one, although they take at least three weeks to finish a clutch, laying every other day for most of the time and only every day for the last five or six days, sometimes three or four.

It seems now to be conceded that the wider the range of the hens the more fertile the eggs. That health and an active, vigorous young male has much to do with fertility is unquestionable.

Now that eggs have been sold by the pound it may not be out of place to give the weight of those of the prominent breeds. Light Brahmas and Partridge Cochins, 7 to the pound; Dark Brahmas, Black, White and Buff Cochins, Plymouth Rocks, Houdans, 8 to the pound; La Flecke, Black Spanish, 7 to the pound; Dominiques, Games, Leghorns. Hamburgers, Polish, 9 to the pound; Bantams, 16. Of these the Dark Brahmas lay the fewest—70, and the Leghorns the most, 150 to 200 per year.

Our own opinion is that jostling of eggs prior to setting has little to do with their fertility, if given 24 or 36 hours in a moderately cool room to give time to recover their normal state prior to subjecting them to the heat of a hen, or incubator.

A dozen good layers ought to keep an incubator of 100 to 200 eggs capacity running all the time. All incubators require time to get hot after being out of use, and the cost of the oil to heat them up, or the time for the hot water to act may be saved by keeping them running all the time.

B. G.

GROWING PEANUTS.

The following is from a Southern paper:

The best time to plant peanuts is about the middle of May, say 10th to 15th, in rows about 3 or 4 feet apart, and 16 to 20 inches the other way, and not cover too deep, 3 or 4 inches, and the best results are obtained by irrigating the ground before planting—it kills all the insects and gophers that destroy your seed, and you get a better stand and a better yield. The reason why peanuts should be planted the middle of May is that they ripen evenly and are of a more uniform size, and not so many little nuts. Very early peanuts ripen unevenly, and the first nuts that set

on get so ripe that they turn to a pink color, and if the land is a little sandy the stems get soft, lose their strength and will not lift the nuts from the ground, and the first nuts are lost, and there are many small nuts with black ends when they are cured.

SEED.

Like all other crops, good seed is required in order to get a good stand. Many made a mistake last year by planting poor seed. It takes about thirty pounds of the California or White Virginia and fifty pounds of the Tennessee Reds to plant an acre. Tennessee peanuts can be planted much closer in the rows. The California peanut is the best to plant, as it yields three or four times as much as the Tennessee Reds do and has a more ready sale.

Peanuts require a rich sandy soil loam, that is known as upland. Damp land gives the nuts a straw color, and they are not as good quality as those raised on higher land. They require no irrigation except on very sandy land, where some have found it profitable, but as a usual thing when irrigated the ground is liable to get hard, making the nuts crooked, ill-shaped and many times coloring them.

CULTIVATION.

Peanuts should be cultivated about the same as corn, not allowing any weeds to grow in them, keeping the ground loose and mellow, and when the spikes begin to form they should not be disturbed. If they are it causes the nuts to blight or not fill out. The blooms do not require to be covered. Many think peanuts can not be raised without covering, but the less they are disturbed after blooming the better.

HARVESTING.

Peanuts should be harvested when ripe, and not be allowed to stand too long in hopes that the last ones set on will fill out and ripen, as you lose more than you gain. The little ones spoil the sale of the crop, and many are left in the ground that get over-ripe. Peanuts should be cut or plowed out and thrown into windrows, nuts down, and let lay a week or ten days and then sacked, as the best nuts are cured in this way, and they do not mold so badly and cure a better color. They must not be allowed to get wet, and then, when it comes to packing, you need not get in a rush, and they can be packed in better shape and it saves hiring so much help. The tops are good feed if stored away for winter use. All kinds of stock like them, and small nuts can be left on the vines. They make the best chicken feed.

MEETING OF FRUIT GROWERS.

It is proposed to have a meeting of the fruit growers of Kent and Queen Anne's counties at the court house, in Chestertown, on Thursday, June 11, at 2 o'clock, P. M., sharp, to discuss the subject of fruit, the manner of packages, freighting and places of landing. This is a matter of great importance to all fruit growers, and it is hoped that both counties will be largely represented.

The American Farmer.

"O FORTUNATOS NIMIUM SUA SI BONA NOBIS
AGRICOLAS." - - - - - Virg.

PUBLISHED ON THE 1ST AND 15TH OF
EVERY MONTH,

By **SAMUEL SANDS AND SON,**

At the N. W. Corner Baltimore and North
Streets,

(Sign of the Golden Plow,)

BALTIMORE, MD.

WILLIAM B. SANDS, Proprietor.

SAMUEL SANDS, } Editors and Publishers.
WM. B. SANDS, }

SUBSCRIPTION:

\$1.00 a year, in advance. Anyone who sends a club of not less than five, will receive an extra copy FREE. To subscribers in Baltimore city, including postage, \$1.25.

ADVERTISING RATES:

	1 Time.	1 Mo.	2 Mo.	3 Mo.	6 Mo.	12 Mo.
1 Inch, 12 lines	\$1.25	\$2.25	\$4.00	\$5.50	\$9.00	\$15.00

Liberal reductions will be made on larger advertisements. Advertisements to remain on outside pages subject to special contract. Transient advertisements payable in advance—all others quarterly. Advertisements should reach us by the 12th and 27th of the month, to secure insertion in the succeeding issue.

At the office of THE AMERICAN FARMER are located the offices of the following organizations, each of which its proprietor, Wm. B. Sands, is Secretary:

Maryland State Immigration Society.
Maryland State Farmers' Association.
Maryland Horticultural Society.
Maryland Dairymen's Association.
Maryland State Grange, P. of H.

Entered at the Postoffice, Baltimore, Md., as Second-Class Matter.

BALTIMORE, JUNE 1, 1891.

OUR OFFICE.

Our friends will remember that our location has been changed, and that we are now to be found at the Northwest corner of Baltimore and North streets, Baltimore, opposite the *American* and *Sun* buildings, with entrances at 228 East Baltimore and 6 North streets. The sign of "The Golden Plow," which has long designated our whereabouts, has a conspicuous and glittering place over our North street doorway.

THE PROPOSED DANISH SETTLEMENT IN MARYLAND.

If the anticipated immigration of Danes to this State materializes, as there is every reason to expect it will, our citizens will have cause to congratulate themselves on a desirable addition to our population. These people form, indeed, almost the ideal of what immigrants should be to deserve and receive a cordial welcome to our midst. Industrious and honest, simple-minded, virtuous and law-abiding, all of them possessed of some capital and most of them experienced farmers, with special skill in dairying, or trained mechanics, they promise to make most desirable settlers, and eventually, excellent and deserving citizens.

The location their forerunner or agent has selected for them is a fortunate one. In the territory between the two great cities of Baltimore and Washington, almost under the shadow of the national capital, with easy and cheap access to desirable markets by two splendidly equipped railways; on lands which, if not now very productive, are quickly and easily meliorated, and upon which every dollar expended in improvements is certain to be returned many times over; with many advantages of climate and none of the casualties which threaten in other sections, they will begin life in the new world under auspices which seem almost entirely favorable, and encountering the kindest wishes of the people by whom they will be surrounded and of the citizens of the State generally.

The Baltimore Sun of May 26 contains the following:

Seventeen hundred fair acres of Prince George's county will soon become the home of 462 thrifty Danes, who, following the leadership of Mr. Peter Ceder, of Copenhagen, will settle in Maryland and make it their future home. The land can be seen in the glimpses by the traveler from Baltimore to Washington on the B. & O. Railroad, if after passing Laurel, with that town on his right hand, he will glance to the left from the car window after leaving Laurel and the Patuxent river six miles in the rear. The pleasing landscape of this place, the slightly undulating surface and the light, nutritious soil has been finally settled upon as being what the Danish immigrants desire, and when about July 8 they set foot upon their future homesteads they will, it is expected, be ready to confirm the judgment of their forerunner. The 1,700 acres is not necessarily all the land that will be needed, nor all that the indications of the first colony may point to as necessary to afford homes for all the prospective colonists, for Mr. Ceder says he may return to find that the group that has already purchased tickets has increased by a hundred or more during his visit here. Besides, several thousands may come in subsequent voyages.

LOCATION OF THE SITE.

The land has been secured through Mr. M. V. Richards, the B. & O. land and immigration agent, and he and Mr. William B. Sands, secretary of the State Immigration Society, have received the thanks of Mr. Ceder as well as his acknowledgment that they were mainly instrumental in detaining the desirable colonists in the best State in the Union. The acres lie, as one can see, on a map, immediately between the B. and O. and B. and P. Railroads, which form from Baltimore to Washington a sort of oblong loop somewhat similar to a modern race track. The central lot of the Danish settlement is Perkins's farm, which is about seventeen miles from Washington, and the farmers will have ample facilities for sending their productions to Baltimore and Washington. Each farmer will take about fifty acres, to

be devoted in part to dairy farming and the cultivation of grasses and cereals. There are, however, truck gardeners among them, whose skill is expected to find the soil particularly adapted to their craft. The Scandinavians will find the people ready to indorse a letter of welcome which Mr. Harold Jackson, the Danish consul, yesterday received from Governor Jackson through Secretary of State LeCompte.

DESCRIPTION OF THE DANES.

How the Danes live at home and how they expect to live here was thus told to a Sun reporter by Mr. Ceder: "It has always been my opinion that when a foreigner goes to a strange country and wants to make his living it his first duty to become a citizen of that country and to adopt the existing mode of living there. Still you must understand that the Danes will doubtless hold on to many of the old customs of our country. I am satisfied they will retain the Lutheran religion, and I think the first thing they will do in Prince George's county will be to build a church. As to schools, I trust the county will supply all that are necessary. Marylanders will be astonished when they find that we Danes celebrate more holidays than they. We celebrate two days at New Year, Holy Thursday and Good Friday, two days at Easter, Whitsuntide, Thanksgiving Day, and three days at Christmas. These days the people of Denmark, from the highest to the lowest, celebrate with religious exercises. They have what is their greatest day, the Fifth of June, when is celebrated the anniversary of the Danish constitution, which was received in 1849 from King Frederick VIII.

THE EDUCATION OF YOUTH.

"In Denmark every child is compelled to go to school from his sixth to his fourteenth year. The common schools compare favorably with those in America, and all Danes can read and write. They have also geographical and historical knowledge. Every country boy and girl attends the country high school from the age of sixteen to twenty. There they can learn drawing, agriculture, surveying and other things pertaining to the farmer's life. Every school building, with its play-grounds, garden and orchard, is part of the public domain, and the public school teachers are trained in the Normal College. Every village school in Denmark has gymnastic apparatus in its yard, and gymnastic exercises form part of the curriculum, which accounts for the superb physique of the Danes.

"Between the ages of fourteen and twenty-one years the boys and girls are compelled to attend Sunday-school in the aisles of the church after the morning service. They are catechised by the minister in biblical history and the articles of faith. The garments worn by the clergy are somewhat similar to those of the Church of England. The liturgy resembles closely that of the sister church across the North sea; hence we find that Danes resident in America feel more at home in the Protestant Episcopal than in the English Lutheran churches.

MUSIC AND MARRIAGE.

"The Danish young man marries usually between the ages of twenty-three and twenty-eight years. The marriage is celebrated six days. The bride and groom drive behind a band of musicians and relatives, and others follow. Sometimes fifty carriages are in the procession. After the ceremony and a dinner at the house of the bride's father the band and procession follow to the new home of the couple, the band playing outside for a time. The Danes share the fondness of northern races for music. Their popular airs—folk-songs—are mostly in the minor key; and are echoes of the moans of the ocean, which sings its first lullaby to the new-born babe, and often wails the requiem of the drowning sailor. The old Norse legends and sages are reflected in the songs.

ONE-STORY HOUSES.

"One-story houses are the rule. They have straw roofs, and the farmer always endeavors to build his barns, house and stable to complete a square. The family eat at the same table with the servants. No distinction is made. The whole household is a pleasant family. In busy times the Danish farmer will work from 4 o'clock in the morning until 12 o'clock at night. In the winter the men thresh and the women knit. Many peasant homes still contain the loom for weaving the family linen.

POLITICAL AND INDUSTRIAL.

"As to politics, our people are home-rulers. In Denmark the people are divided into two great parties, as in America. They take a lively interest in every public movement.

"In the colony that is coming here there are a number of girls from 18 to 28 years. We will try to secure employment for them in the State as family help, and I have no doubt that the family who gets one of them will retain her. The women are good workers and trustworthy servants. One need not be afraid to give them the keys to a jewel-box or the care of children. As for the men they are great workers, and no employer need fear that they will not be in their places Monday mornings."

And the *American* adds the following details concerning the purchase:

Mr. Peter Ceder, the agent for the Danish colony which has been seeking land for a settlement in this State, went to New York yesterday and will sail immediately for Copenhagen. He secured for his people a tract of about three thousand acres, embracing the land owned by State Senator Charles E. Coffin, the Perkins estate, and the Hall property. These parcels of land are all in Prince George's county, and the entire tract commences at a point a mile and a-half east of Beltsville, and extends north, following the line of the Baltimore and Ohio Railroad to about two and a-half miles of Laurel. It all averaged the extremely low price, \$12 an acre, some of it selling for \$10, and some of it for \$12 an acre. Considering its admirable location, midway between the capital of the United States and the great seaport of Baltimore, and

not more than a few miles from two magnificent trunk railroad lines running east and west, and north and south, and embracing more than eleven thousand miles of railroad under their management, the price may be said to be wonderfully low. There are several houses and outbuildings on the property. The land is light loam on the low hillsides, and rich in the bottoms, where there is a heavy growth of timber and a good stream of water. Tobacco has been grown upon the cleared land, and the meadows are rich, and have not been cultivated.

Mr. Ceder expects to arrive here with his friends from Denmark early in July. His party consists of about seventy families, including about seventy-five girls and several carpenters, bricklayers, and other tradesmen. The girls will be able to secure work in the neighborhood as domestics, and the cities of Baltimore and Washington, and the tradesmen will be employed in putting up the houses for the new settlement. Most of the males of the families are farmers, accustomed to trucking. They will establish a store at some convenient point on the Washington Branch of the Baltimore and Ohio Railroad, and will have a postoffice, school, and church near the farms, which will be divided into lots averaging fifty or sixty acres. Most of the colonists profess the Lutheran religion.

Mr. Ceder will take with him to Denmark a letter from Governor Jackson, extending a hearty welcome to the Danes; also, one from Mr. Wm. B. Sands, of the State Immigration Society, assuring them of all the assistance possible. Danish Consul Jackson has also sent them a letter, expressing the opinion that Maryland is a very desirable field for them to settle in. A number of practising physicians have written letters about the healthfulness of the location.

The terms upon which the land is sold to the Danes are very easy. They will be required to pay only about from one-seventh to one-fifth cash on the land allotted to them, the remainder of the price to be paid in yearly instalments, with six per cent. interest.

THE WESTERN WHEAT CROP.

The Farmers' Review of Chicago, in its last issue, says: "Throughout the country the condition of winter wheat has not greatly changed. In some sections drouth and insects have produced a small apparent decline, but this decline has been largely offset by recent copious rains. In Illinois, seventy-three correspondents show the prospects for an abundant crop of winter wheat are still good. The average condition is considerably above the average. The Hessian fly has done considerable damage in some counties, more trouble from this cause being reported than from any other state. Indiana reports show that the general condition of the wheat crop good. None of the correspondents

mention the Hessian fly. The prospects in Ohio are good, only a few correspondents reporting damage from drouth and late freezing. Winter wheat in Kentucky has been damaged some by cold weather, drouth and rust. Larue county reports damage from the Hessian fly. Fifteen correspondents, however, report the condition equal to or above an average. Michigan crop promises to be about an average one. The condition of Wisconsin wheat has been lowered by dry weather, but the late rains will undoubtedly have a beneficial effect. According to present appearances, it will be nearly an average crop.

"Kansas has fallen considerably since last reports. Although the crop will be a good one, it has been injured considerably by recent dry weather. Hessian flies and chinch bugs' ravages reported from Coffey, McPherson, Marion, Reno, Dickinson, Butler, Montgomery, Riley, Sedgwick, Woodson, Labette and Gray counties. In Missouri some damage from Hessian fly is reported, but the prospects are good for more than an average crop. In Nebraska and Iowa the condition is good, Des Moines county, in Iowa, alone reporting damage from Hessian fly. Oats are looking badly in Illinois, Indiana, Ohio and Kentucky. In Nebraska and Ohio the crop is in good condition, and promises a full yield. In the other states the condition is considerably below an average. In Kansas and Missouri, while the outlook is very good in some counties, it is poor in others."

WANT THE CONTROL.

Messrs. John C. Walsh, Wilmot Johnson, Charles B. Calvert, Charles H. Stanley, William H. Bosley, Charles R. White and Allen Dodge, trustees representing the stockholders in the Maryland Agricultural College, have filed a petition in the Circuit Court of Prince George's county, against the Governor and the board of public works of the State, including the directors on part of the State. The petition complains that the stockholders have not a fair representation in the board of trustees and that the management of the college is placed in the hands of those not entitled by law to exercise it. They ask for a mandamus against the defendants, commanding them to turn over to the petitioners the office of trustees of the college, the books, papers, etc., and to give the petitioners the representation on the board of trustees to which they are entitled under act of 1866, chapter 53, and to allow them the representation and vote of seven in a board of eleven members. An order was signed by Judges Briscoe, Brooks and Crane, laying a rule upon defendants requiring them to appear in court and show cause on or before the 15th day of June, 1891, why the writ of mandamus should not issue as prayed for, provided a copy be sent to William Pinkney White, attorney-general, one of the defendants, on or before the 1st day of June, 1891. The plaintiffs are represented by Charles H. Stanley, one of the plaintiffs.

HOME DEPARTMENT.

The What To Do Club.

OUR MOTTO.

Do what you can,
Not what you cannot;
Not what you think ought to be done,
Not what you would like to do.
Not what you would do if you had more time,
Not what somebody else thinks you ought to do,
But, do what you can.

I THINK Amanda A. has demonstrated fully that it is better not to live in the midst of one's work, nor get in its vicinity. It is well to forget it when we are done with it. It is clearly a Scriptural injunction that we *take no thought for the morrow*. How can we help thinking about a thing that is staring us in the face all the time? And, on the other hand, why should we not live as much as we can among our pleasantest surroundings. I know some of you say (especially those who have children), how can we keep things nice if we use them all the time? Well, if you mean *spic and span nice*, of course you cannot, but that kind of *niceness* is not popular; it may show your housekeeping off to advantage. No! that is a mistake; show rooms—especially those seldom used—are no indication of the condition of the rest of the house. It does seem to me that people are getting to be more honest in their manner of living. They are not so bent upon turning only one side of their lives out, and are not so much afraid of what people think of them. I don't believe any one in these days would split a narrow stair carpet down the middle and cover a bare strip down the centre with crash, to make it look like a protection for a wide carpet. No carpet would be preferable. Yet it was not an uncommon device half a century ago.

It seems to me that everything we do for the mere sake of appearance is more or less sham. I don't mean by that the things we do for beauty or fitness, only what we do to make our possessions, or our circumstances, seem better than they really are. If we have to economize we need not make a secret of it; and if we have plenty, we may as well use it openly and honestly.

Pomona asks S. D. how to keep worms from late cabbage. I have tried a liberal pinch of salt on the centre of each head, in the evening or just before raining, and found it good. The rest of the information asked I will hunt for if no one else gives it. DOROTHEA DOOLITTLE.

I do wonder that people will go to live where fruit and vegetables cannot, and I pity Mrs. Funston from the bottom of my heart. What can they find in such a country worth having? We who have an average climate and abundant fruit and flowers ought to count our blessings every day and be proportionately thankful. I should think every one would come to live in Maryland who could crowd in.

Our asparagus bed, which for two or three years has seemed to be failing, has this year picked up and given us an over-abundance. I attribute it to bad usage, having trusted the hired man, but this year my son took it in hand, gave it a liberal top-dressing of manure and a liberal sup-

ply of salt this spring, so that it has been better than ever before.

One gets tired of the usual way of cooking—with toast under and drawn butter over it—so I vary it by making soup of it. Use a mutton or veal broth, boil asparagus tender, mash through a colander as you do peas, and treat the soup just as you do green pea soup. Fry squares of bread in butter till light brown, put in the tureen and pour soup over as you are about to serve it.

HELEN BLAZERS.

"HERE!" though late to answer to roll-call, and when I have given my excuses—I know it is not good taste to begin giving them as soon as one is seated—with the bright faces of the sisters, most of them looking so contented and having clear conscience, I drop my eyes under their gaze and begin. First, a marriage from the house—and most of you know what that means these times when help is so scarce and the detentions connected with country life, waiting for this, that and the other, to finish off garments, etc. Had the work been for a young, bright girl just about to assume the duties of married life, with so much before her, it seems to me it would have been easier, although their wants are greater in "this world's goods," but to arrange for the marriage of a woman *well up in years*, is indeed hard to do. Second, an attack of the malady now spreading over the country, la grippe, put me to bed, and since being up, my usual energy has not returned, and I fear will not fully return for months. When every thing, and every one depends upon *one* person on a farm to manage all the departments, it is indeed a serious thing for sickness to overtake oneself. Loneliness surges over us when there is no sympathizing, listening ear in which to pour our petty, every-day trials, and a house-keeper's life is full of them. Did I hear you say, enough! Yes, I think so, too, for it does no good to complain. We are put here to brighten, not sadden the life of others, therefore let us do the former.

The beautiful roses are blooming so profusely this season, and earlier than usual. Now is the time to try the "Table Decoration" found in April 1st of THE AMERICAN FARMER, a paper we all welcome so heartily semi-monthly. Do not fail to hunt up your glasses and bowls to imitate the cut given, and when your families are seated around the cheerful table, look around to see if the smiles are not deeper and words more eloquent than usual. Flowers, you know, are refining; even the children feel their influence, and 'tis their minds and hearts you must train, for in a few years, very few, they will have taken the places of older and more experienced ones, who may have been called away to their long rest.

How novel to me seems the life of our Kansas writer. I am much interested in her home descriptions. I know nothing of Western life and sincerely hope she may let us hear from her frequently. I am so curious to know what State she moved from, and if she would not think me too inquisitive, to know what took her to so new a place and how long she has lived in Gover county.

I was surprised to find from an article in the last FARMER, ensilage is used in summer. I had no idea it would keep after warm weather set in. I used it a few times, but not with much success, and one winter I neglected feeding it until February, which seemed too late; not being able to consume it before grass put up, at that season the ensilage began to sour and cattle refused to eat it. I hauled the balance out on the farm for compost, I thought, but I noticed whenever the cattle got in that field they made for the ensilage. I did not know why they enjoyed it then, when they had refused to eat it earlier in the season. I believe it to be acquired taste any way.

How can walls of hard finish be whitened? I have mine washed twice a year to keep the fly-specks and dust off. I find they are growing darker with age. What can I do to make them pretty again? A painted wall is pretty, but expensive, and we have no painters in our section?

Can any of the sisters tell me how to stop the beds from creaking?

I am sorry "D. D." looks upon a vegetable dinner as "a dinner of herbs." I feel there is nothing better than these raised under our watchful eye, and they come to the table so fresh and juicy. My, how I would enjoy a mess of fresh peas from a country garden! but it looks like several weeks will elapse before we have that great treat.

Let us all resolve to plant out several varieties of strawberries in the fall; that way we can have them for so much longer time. And what is nicer three times a day than strawberries gathered from our own gardens!

BESSIE.

THE question of when and what to eat may seem to some a hackneyed one, but is of vital interest to all. A healthy stomach and clear brain add more to the enjoyment of life than indulgence in the luxuries so carefully and expensively heaped upon many tables. To simplify and have sound, vigorous health is preferable to the paraphernalia of the sick room and all its dainties. I have had people tell me "they would rather have something good to eat and be sick than to deny themselves." The food originally assigned to mankind was very simple, and if all had continued in this primitive state of innocence and freedom from all the worry consequent on luxurious living, they would have been a different race physically and mentally. Most of us aspire to a long life, and the only means to attain it are by refraining from excessive, as well as improper, indulgences. Graham gems, milk, fruits and other light foods are not simply for babies. The farmer who makes his breakfast on meat or fish, fresh or salt, with or without condiments, has a consuming thirst and often a demand for stimulating drink. This indulged in, consequent depression takes place and the "all-gone" feeling demands its stimulating dinner. The farmer who breakfasts on gems, crushed, pearled oat or wheatena, and fruits, eats and drinks simultaneously and requires no extra draught, has his brain in a composed state, his temper and passions under control, is able to work as many hours of the day as

others and has the pleasure of better regulated health and greater length of years than his compeers, who are constantly exciting themselves by stimulants in the form of flesh, fish or alcohol.

Many farmers of athletic frames and constitutions break down early, not exclusively by being worn out by hard labor, but in great part by their overfeeding three times a day on flesh meats, especially pork. If their food was more simple they would complain less of the effects of hard labor and infirmities of age at seventy than they do now at fifty. It has been clearly demonstrated that the brain is clearer, the organs of digestion less heavily taxed, the whole machinery of life in better running order when the meals are made up of simple food, simply cooked. Is there not something gross in eating so much pork, infested perchance with the little mischief-makers, which being out of sight are also out of mind? Does not the patient stomach protest against food made hard by frying? Do griddle cakes soaked in butter, stewed kidneys, cold boiled ham, washed down with tea and coffee, make pure blood, keep the brain clear, the nerves quiet and strong for the wear and tear of life? It is well to think of these things, and, if what is called a generous table proves to be a hindrance, then let all seek out and practice the better way. A recipe for strawberry fritters calls for a pint of the fruit stirred in batter and fried in plenty of boiling fat. How much better to serve the berries plain in pretty glass dishes! Have a small side table set at each end of the table where the viands for use can be reached and the dishes not in use placed there without extra attendance. As to the flies, if a little pick-aninny is not attainable as here at the South, to gracefully wield the fly-brush, or there are no fly-fans or traps near, then use spider-web fly-paper concealed by vases of flowers or fastened back of pictures.

A STRANGER.

Sand Hills, Augusta, Ga.

I FEAR you will think this letter unreasonable, for I have it on my mind to tell you about the snow-storm and three days' blizzard that visited us the last week in March. As far as I know, little or nothing was said about it in the newspapers, for fear, I think, of discouraging people looking for homes in the West. One of the principal advantages held out to settlers was the short, mild winters, and that cattle would not only live, but grow fat without shelter or food through the winter, except such as the prairies afforded. That some have existed under those circumstances I admit, but it was a costly experiment, by the thousands of cattle on this range a few years ago. When rounded up in the spring only four or five hundred were found alive. What became of the others, the tons of bones gathered by the homesteader and sold at the railroad towns will give you an idea.

The story of the failure of the crops in so many parts of our country last year, and the words "drouth sufferers," are familiar to every one. With us, a few loads of corn-stalks or cane, perhaps a small stack of wheat or rye not worth thrashing, constituted our stock of feed. Hardly any

one had more than would last two or three weeks. Some feared to run the risk and drove their stock a hundred miles or so East, where crops had been better; others had to stay, hoping that "He who tempers the wind to the shorn lamb" would not forget us, fixed up the sheds and made what preparations they could for winter. The first snow fell on the eighth of January; from that time till the eighteenth of April there was never a day but one could find snow in the draws or ravines. It did not lay long on the prairies, and the cattle, though thin in flesh, were able to "rustle." Winter passed and we were singing "Live horse and you shall soon have grass." On the twenty-third of March, about noon, it commenced to snow; we "said it cannot be much at this time of the year." As night came on the storm increased and the wind was terrific; it continued all night and in the morning was no better; the snow had drifted on the north and south sides of our house up to the eaves and the doorways were blocked up. The boys made their way first to the horse stable; that was full of snow up to the horses' backs. Then to the cattle-shed open on the south, and the corral was one big snow-drift. An hour longer and not one would have been taken out alive. The horses were turned out to face the storm, or rather to drift with it; they seem to be able to take care of themselves better than cattle. The cows were put in the stable, chicken houses any place, for shelter; and still the snow fell and drifted, every ravine was full and about six inches on the level. It was dangerous to travel even a short distance, one was liable to step off and drop into a drift thirty feet deep. Some stock was lost that way. The number of cattle in this county was about twelve thousand; ten per cent. died in that storm. Some lost every head, as many as forty; others, only a few. It would make my letter too long to tell of all the expedients resorted to to provide food for the starving animals. Some cut willows and carried to them; others having sheds covered with old hay or cane tore it off; one man emptied his bed-ticks and, if he was never thankful before that his beds were filled with straw and not feathers, I guess he was that day.

If there should dwell in the heart of any that read this a spirit of discontent, it may do them good to hear a little of how the "other half live," and lead them to feel how much they have to be thankful for, and that after all the "lines have fallen to them in pleasant places."

LOUISE FUNSTON.

Gove Co., Kansas.

THE plaguey men folks we have on the farm almost worry the life out of me. After I have treated them the best I know how, they say women don't know how work ought to be done. I was seriously considering whether life was worth living, or marriage a failure, when Barkis's sympathy for me came in and turned the scale. Then, I thought, as long as there is one sensible man like him to be found there is hope.

I have formed my plan of garden work which I think will be a success, being convinced that it is no use to put a man in a garden with a

hoe, for there is danger of their taking root—and I want something more ornamental in my garden—I like to see them in action and the hoe moving, but when stock-still, like a scare-crow, they are no more use than one. They say the field-work must be attended to first; they put in crops and fertilizers when often it takes one to pay for the other, and I know that the garden is the most profitable spot on the farm, and all I ask is plenty of well-rotted manure and the ground worked at the proper time and kept in fine tilth with a thorough working once in a week. This spring I have had it laid off both ways and planted all in hills, the small seed in little circles. The peas look nicely twined together in pillars, and the beets, onions, carrots, etc., have a cute appearance in their circular groups. My object is to have the ground cultivated both ways with a two-horse cultivator, knowing when the horses do all the work men will ride behind them.

I find it is not only the new countries in the West that the lady wrote home describing a fine country, for men and dogs who have lots of fun hunting, but awful hard on women and horses, but that is a good deal the fault of the women. For my part I expect I am too good-natured and too easily persuaded, but if Sally knows herself, she is going to have the old order of things reversed in her grange. I think if some of the sisters will try a circular hill of peas and notice how they throw out their little supports and cling to each other, it will remind them how a family circle should grow up and support each other against winds and storms which are sure to come in the best regulated families.

SALLY LUNN.

HOURS OF EASE.

ADD TO YOUR VOCABULARY.

A certain father constantly told his daughters, "Girls, get new words in your vocabularies!" It was plain his admonition was heeded. Seldom were girls met whose language was as varied and picturesque as theirs. They were never at a loss to express exactly what they intended. They used different phrases to describe different feelings and sensations, and the proper one appeared where it was needed. After talking to the average girl, to whom everything is "awfully sweet," or "simply dreadful," and whose terms for joy or grief, assent or denial, can be confidently predicted, it was a pleasure as well as a relief to listen to these bright young people, whose conversation showed what might be accomplished with a little effort.

The English language, made up as it is of words derived from the principal languages of the world, holds immense possibilities for the student. Those able to speak or write it easily, who have a ready command of a correct phraseology, possess a power quickly recognized and strongly felt. And it is a power with a sufficient amount of study can give to those willing to take the trouble to acquire it.

Every one may not be able to write freely and with the most agreeable effect to the reader, although,

with the requisite amount of pains, more could be done in this direction than most people suppose. But it is at least possible for young people—and some older people—to “get a few new words into their vocabularies.” A book of synonyms is an easily accessible help. It could teach a few adjectives besides those in every day use, which are frequently worn threadbare. Indeed, some of these stock phrases have become meaningless. A family which established a fine for the use of any one of them, coupled with a reward for a clever application of a new word, might institute a reform which would spread, as do the ripples, until it covered a whole corner of society's millpond.—*Harper's Bazar.*

OUR BOYS AND GIRLS.

Being fully convinced that the very best work we can hope to accomplish in “The Home Department” will always be that of awakening and developing the energies and ambition of the coming men and women of our circle, with a desire to accomplish some definite and worthy purpose, I will, with our editors' sanction, offer two premiums to those boys and girls who between this and the end of the year will adopt some method of earning money, and pursue it honestly and faithfully, and then send in a clear report to this department, written by themselves, and submitted in time for publication in the November No. of THE FARMER.

The clearest and most satisfactory REPORT, showing perseverance and systematic pursuit of the plan first adopted, even though others may have made more money, will entitle the sender to a copy of PRESCOTT'S FERDINAND AND ISABELLA, Illustrated Library Edition, 2 vols., which the approach of *Columbus' Quadra-Centennial* will render timely and particularly interesting.

The second best report entitles the sender to a copy of “THE BOYS AND GIRLS' OWN BOOK”—a popular encyclopedia of the sports and pastimes of youth.

Three of the regular correspondents of THE AMERICAN FARMER will be asked to judge of the merits of the reports as they appear in the November 15th number of the paper, in time to announce the successful competitors and send premiums by December 15th. The names of the competitors must not appear in the paper, but be sent to “CERES,” together with the reports, and the judges will not know them till the announcement of the successful ones is made on December 15th. There are many ways in which boys and girls can earn something regularly and systematically, and it will be interesting to our readers to know just how each one does it, and a most excellent practice for them to give expression to their experience during the undertaking.

Do not strive to do great things. Do that which comes to hand most naturally, and don't weary in doing it well and continuously. It is in that way the greatest deeds come to be done, and if by this effort the ball is set rolling that leads to greatness, in one or more of our young people, I hope the Home Department will live to see it.

CERES.

LIEUTENANT GRANT'S CHANCE.

The true story of Lieutenant Grant is almost too good a story to be true, and reads like one of those that Mr. Rudyard Kipling invents.

Its scene is laid in Mr. Kipling's own territory, and it deals with dacoits and jungles, and the little daring Goorkhas of whom Mr. Kipling is so fond, and with native princes and rajahs and hand-to-hand fighting and the glory of the British arms.

In the early part of April the Associated Press, under the unfamiliar date line of Calcutta, told of a massacre in Minipur, wherever that may be, where semi-barbarous native Indians arose against the representatives of the Empress of India and killed them treacherously while they were negotiating terms of peace, and trying to put the right rajah on the throne from which troops of the wrong rajah had driven him. The news was partly rumor, partly horrible fact, and the names of many commissioners and officers were given as dead and as butchered after death. And at the end of each newspaper account was the brief statement: “Lieutenant Grant, who left Tamur for Minipur with eighty men, has not been heard from. He is believed to be dead.” It was a most unimportant ending of an anticlimax. Nobody but the Grants of Grant, in the Highlands of Scotland, who “raised the Black Watch,” knew or cared about this unidentified and unknown Lieutenant Grant. What was one lieutenant and eighty men to three commissioners and colonels and the commissioners' wives and the picked troops of the Forty-fourth Goorkhas?

But on the days following came fuller and more accurate accounts of the massacre; and it was told how the Manipuri had shelled the Residency with the same cannon the Empress of India had sent them as a token of her royal good feeling; and how the young officers and Mrs. Grimwood had escaped in the night and travelled on foot by jungle paths for 120 miles, living on roots, to be rescued at the last by Captain Cowley hurrying forward with reinforcements; and how Mrs. Grimwood's husband and the others who had left the Residency to arbitrate had been cut into quarters and thrown into the moat for the pariah dogs to mangle as they pleased. It read like a page from the history of the Sepoy mutiny, like a modern version of the terrible stories of Cawnpore, Delhi and Lucknow, and it was a blow at the British rule in India, and a trial to the hearts of every one who read it, whether he read it in English or translated into a foreign tongue. But there was one saving clause, one paragraph that lightened the rest for every one who read it, for Lieutenant Grant, the unknown, marching, unconscious of massacres, between Tamur and Manipur, had at last been “heard from.” His paragraph came at the end, as it had on the days before, modestly, as became his rank, behind the colonels and commissioners. “Lieutenant Grant,” it read, with 80 men, has defeated 4,000 Manipuri, and has taken Fort Thobal.” Now nobody knew whether Fort Thobal was bristling with cannon or a mud embankment, but

every one could appreciate that 80 into 4,000 goes fifty times, and that Lieutenant Grant's chance was only one in fifty when he charged up the wall of Fort Thobal and drove the Manipuri across and over the other side. And all over the world, thanks to telegraphs and cables, the name and fame of Lieutenant Grant became momentous and familiar, not only in the clubs of London, but in the elevated cars of New York, and at breakfast tables from Paris to Portland, Oregon. For if all the world loves a lover, it loves a hero next, and the chance that came to Lieutenant Grant, and the way he rose to it, became a brilliant spot in the gloomy tale of treachery, butchery and blundering of the Manipuri massacre. Lieutenant Grant held Fort Thobal for three days, and then repulsed the Manipuri again at Alongtaing in a fight that lasted three long hot hours, during which the Senaputty prince and his two commanders were killed, and the Manipuri were driven off into the jungle by Lieutenant Grant's men of the Second Burmahs.

General Sir Frederick Roberts, the commander-in-chief of the Indian army, has congratulated Lieutenant C. J. W. Grant, which is as it should be, and “Punch” has given him a full page all to himself; it is also as it should be that Lieutenant Grant is as handsome as his portrait shows him to be, and that he is only thirty years old. “It is the boys—the raw boys—who do the fighting,” Mulvane says; and though Lieutenant Grant is no raw recruit, he is a boy in years, and the Second Burmahs are but newly formed. Now, while the home government sends out more commissioners to determine who blundered and who should be punished, let us hope that some other Board of Investigation and Inquiry will do more for Lieutenant Grant than congratulate him, and that he may go to Simla on leave, and ride “with all the pretty girls, and wear cool things, and drink the wine of praise and approval, and keep out of the clutches of Mrs. Hanksbee. And in time he may get his regiment and become a K. C. Who knows?

And in the meanwhile his father, Lieutenant General D. G. S. St. J. Grant, who is now in London, goes to all of his many clubs that the members may say, “Ah, Grant, fine boy that boy of yours; ought to be proud of him.” And then the Lieutenant General says, “Pooh! pooh! only did his duty”; and then goes home, and tells his wife everything they say.

Perhaps this may seem to you a great deal of bother about one young man; but do not think of what he did, but what he might have done. He might have said: “I have no instructions to take Fort Thobal. I have no right to risk my men's lives at odds of fifty to one. I ought to make a masterly detour, and show my strategic knowledge, and leave Fort Thobal and the 4000 Manipuri alone.” Who would have blamed him? Fabian would have done it. But Lieutenant Grant walked right up the mud wall and over the other side. It was his chance, you see, and he took it; and teaches the moral that when one's chance comes, it is much better to be reported as “heard from” than “missing.”—*Richard Harding Davis, in Harper's Weekly.*

HINTS AND HELPS.

RECIPES.

LEMON BUTTER OR HONEY.—Take 8 lemons, grate the rind of 4 of them; the yolk of 12 eggs, $\frac{1}{2}$ pound of butter, 2 pounds of pulverized sugar; beat well, and boil about half an hour, stirring constantly. This is considered by some to be fully equal to honey made by bees. Try it, you who are without bees.

ENGLISH WALNUT CANDY.—White of one egg whipped and mixed with one pound of confectioners' sugar. Mould the nuts in it and place upon a dish to harden. Delightful!

BESSIE.

A GLOVE BAG.

Made of any goods you choose, always choosing what will suit best the place where you design the bag to be hung. Three different kinds of cloth, each five-eighths of a yard in length, and each to measure as much or more in width.

One kind for the outside of the bag, one kind for the lining, another for an inner lining. Also a small bit of plush or velvet. Six good-sized brass rings, and three yards of cord or ribbon for strings. A piece of box-board or very stiff paste-board.

Directions for making: First, cut from three kinds of cloth three circles as large as the cloth will cut, exactly the same size. (The interlining is best or crinoline.)

Next, cut from box-board two circles the size of a large saucer, exactly alike. One of these small circles place between the outside and interlining, putting the centre of the large and small circles exactly together.

Prepare the other small circle by basting the plush or velvet on to one side, leaving a large seam to turn over the edge of the circle. Cut two or three rounds of old flannel or thick, soft woolen cloth, just a trifle smaller than the paste-board. Place these between the two small circles, and sew together with long cross-stitches. Next, baste in smoothly the inner lining, sewing lightly around the small circle to hold all in place. Finish the edges of the large circles all together, either with a binding or a large cord. On the finished edge, at equal distances, sew the six brass rings. Through these rings draw two sets of strings to hang the bag by. The edge of small circles fill thickly with pins,—hat pins, shawl-pins, and smaller pins, black and white.

This bag will be found very convenient for hall or hall-closet. The cushion at the under side, always ready to answer the often repeated “Will you be kind enough to give me a pin?” and the open pockets keeping in safety the gloves or mittens until wanted.—*Esther Paige*

BRIEF NEWS SUMMARY.

GENERAL.—Fire in Jacksonville, Fla., caused a loss of \$500,000.—By the explosion of powder on a work train at Tarrytown, fifteen men were killed and twenty wounded, mostly Italians.—A mortgage for \$31,000,000 has been filed on the Chicago, Rock Island and Pacific Railroad.—Two thousand people witnessed the opening of the graves of the mound builders at Fort Ancient, Ohio.—Mr. Blaine continues to improve in

health—The lumber lockout in New York ended—United States supreme court upheld the constitutionality of the original package law passed by Congress—A trust fund has been given for an Episcopal cathedral at Washington—Secretary Tracy has issued an order applying the civil service methods to Norfolk navy yard—President Harrison returned safely to Washington after a trip of 10,000 miles—The Northwestern railroad discharged its switchmen in a body, in order to be able to run its road without interference—The President commuted to life imprisonment the death sentence of the Navassa murderers—Negotiations for reciprocity with Peru are expected to be opened in Washington—A complete mail service with Alaska will be inaugurated July 1—Secretary of the Interior Noble requested the resignation of Green B. Raum, Jr., as the assistant chief clerk of the pension bureau—The Industrial Conference held in Cincinnati formed a third party, to be called "The People's Party of the United States of America," the platform declaring for the abolition of National banks, for the sub-treasury scheme and the free and unlimited coinage of silver.

FOREIGN.—The Czar with of Russia was attacked and seriously wounded by a fanatic at Otisu, Japan; the attack was the result of a visit to a Buddhist shrine by the Czar with, who wore his boots, an offense against the religion of the country—A politico-financial panic occurred at Lisbon—Municipal elections in Spain show a large monarchist majority—Emperor William was thrown from his carriage and had a narrow escape from death—The Portuguese Cabinet resigned—The immigration of destitute Hebrews from Russia into England has assumed such proportions that the country, it is said, is becoming alarmed—Ex-Queen Natalie was taken from her residence in Belgrade by soldiers and forced to leave Servian territory—Kunkel Hercules, president of the French Ethnological Society, while conducting an investigation into the locust plague in the village of Sideral, was overcome by heat and fatigue and fell asleep. He was attacked by locusts, which devoured him—There was a sleet and snow-storm throughout Great Britain.

MARYLAND.—The Queen Anne's Farmers' Alliance adopted resolutions favoring tax and administrative reforms in Maryland—The Farmers' Alliance in Talbot county demand three-fifths of the delegates to nominating conventions for members of the Legislature and county commissioners—The Kent County Farmers' Alliance is looking after representation in the Legislature—Preparations have been made in Hagerstown for the June meeting of Dunkards on a large scale—The timber on the Yough Manor tract, Youghiogheny river, Garrett county, Md., has been sold for \$50,000—Mr. Lewis Ridgely died in Howard county, aged seventy-eight years—Reports from the prospecting party in the interest of the Danish colony indicate that 500 Scandinavians will settle in the Western part of Maryland this summer—The grand jury of Harford county has presented the directors of the Maryland Central Railroad for manslaughter in causing, as is alleged, the death of the victims of the Overshot trestle through decayed timbers in the trestle—The United States signal station at Baltimore will be moved to Johns Hopkins University, where, with the co-operation of the University and the Maryland Agricultural College, a State weather bureau will be established—Several business buildings were destroyed by fire in Cambridge—Cardinal Gibbons was taken sick with a malarial attack at Bryansville, Charles county, and compelled to give up his visitation to Southern Maryland—The Cecil County Agricultural Society has re-organized, with George S. Wobley, president—Ex-Judge George W. Dobbin died at his residence in Howard county, in his 82d year—Col. Harrison Adreon died, in his 51st year. He was appointed postmaster of Baltimore by President Garfield, and was a lawyer by profession.

BALTIMORE MARKETS—May 30.

BREADSTUFFS.

Flour—Quiet. We quote city with Super. \$3.75 a 55; Extra \$3.50 a 55; Western Super. \$3.75 a 55; do. Extra, \$4.25 a 75; do. Family, \$4.25 a 75.

Wheat—Southern steady, quotations being 1.10 a 14 cts. for Fultz, and 1.12 a 15 cts. for longberry. Western firm and active; No. 2 red spot selling at 1.11 1/2 cts., June 1 07 1/2 cts., July 1 06 1/2 cts.

Corn—Southern steady, white selling at 65 a 67 cts., and yellow at 65 cts. Western dull. Mixed spot was quoted at 65 1/2 cts., July 6 1/2 cts.

Oats—Quiet. Ungraded Southern and Pennsylvania 62 a 55 cents. Western White 54 a 55 cts. Rye—Inactive at quotations. Choice Western 97 a 98 cents, good to prime, 96 a 97 cts., and common to fair 85 a 87 cts. per bushel.

Hay and Straw—Hay firm and in demand at quotations. Choice Timothy, 12 50 a 13; good to prime, 12 a 12 50; mixed, fair to good, 10 00 a 11; common and inferior, 8 00 a 9; clover, 9 00 a 10; off grades, 5 50 a 9 50 on track. Straw ruled firm. Rye in carloads at 17 50 a 18 for large bales in sheaves, 12 a 13 for blocks; wheat, blocks, 8 a 9; oat, blocks, 10 50 a 11 50. At scales—Hay—Timothy, 11 a 13; Clover Hay 9 a 11 per ton. Straw—Wheat, 8. Rye, 14 a 17, Oat 8 per ton. Ear Corn 9 00 a 10 per bbl.

Mill Feed—Firm and in good demand. Western Bran, light, 12 a 13 lbs., 22 a 23; medium, 14 a 16 lbs., 20 a 21; heavy, over 16 lbs., 19 a 20, and Middlings 20, all on track; City Mills Middlings, 22 per ton, delivered.

Provisions—Quiet, with quotations as follows: Sugar-pickled Shoulders 6 1/2 cents; smoked sugar-cured Shoulders, 7 1/2 cents; sugar-cured Breasts, 8 1/2 cents; canvased and uncavased Hams, small averages, 11 1/2 a 12 cts.; large averages, 11 1/2 a 11 1/2 cts. per lb. Mess pork, old, 12 00, and do. new, 13 00 per bbl. Lard, best refined, pure, 8 cts. per lb.

Butter—Demand fair. We quote fancy creamery 18 a 19 cents, good to choice creamery 16 a 17 cents per lb. Imitation creamery 14 a 16 cents per lb. Fancy lard-packer 14 a 15 cents, prime to choice do. 13 a 14 cents per lb. Store-packed 12 a 13 cents, and creamery prints 19 a 20 cents per lb.

Cheese—Dull. We quote fancy full cream, New York State, 58 to 60 lbs., 10 1/2 a 11 cents, choice full cream, 10 1/2 a 10 1/2 cents; New York flats, 30 to 35 lbs. size, 11 a 11 1/2 cents per lb.

Eggs—Receipts small; quotations for hen eggs 15 cents per dozen.

Poultry—Demand good. Quotations: Large spring chickens, 25 cents per lb., small to medium 20 a 23 cents per lb., old hens 11 1/2 a 12 cents per lb., and old roosters 25 a 30 cents apiece.

Canned goods—Steady for the season. We quote two-pound Peaches, \$2 00; three-pound peaches, 2 a 2 1/2; two-pound tomatoes, 65 cents; Marrowfat Peas, 1 00 a 1 15; Early June Peas, 1 25 a 1 40.

Tobacco—Receipts, goods and prices maintained at quotations below for Maryland—Common and frosted per 100 lbs., 1 a 1 50; sound common, 2 a 3; good common, 4 a 5; middling, 6 a 8; good to fine red, 8 a 11; fancy, 12 a 13; upper country, 2 a 3; ground leaves, 1 a 2.

Wool—Demand moderate. We quote unwashed 22 a 25 cents, tub-washed, 22 a 25 cents, pulled, 25 a 28 cents, and Merino 16 a 18 cents per pound.

LIVE STOCK.

Beef Cattle—Fairly active. Prices of Beef Cattle this week ranged as follows: Best Beeves 5 75 a 6 00, those generally rated first quality 5 00 a 5 75; medium or good fair quality 4 00 a 5 00, and ordinary thin Steers, Oxen and Cows 2 00 a 3 50 per 100 lbs.

Sheep and Lambs—Dull. We quote sheep at 2 a 3 cents per lb. gross, and lambs 6 a 7 cents per lb. gross.

Pigs—Inactive. The range of prices for good hogs is from 6 a 6 1/2 cts., good fat Western at 6 1/2 a 6 3/4 cts., most sales 6 1/2 a 6 3/4 cts., with choice at 6 1/2 cts. net; rough hogs down to 5 a 5 1/2 cts. net.

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\$75.00 to \$250.00 A MONTH can be made working for us. Persons preferred who can furnish a horse and give their whole time to the business. Spare moments may be profitably employed also. A few vacancies in towns and cities. B. F. JOHNSON & CO., 1009 Main Street, Richmond, Va.

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White Marsh P. O., Baltimore Co., Md.

Cabbage, Savoy, Borecole, Sweet Potato, Tomato Plants. Also, Flowering Plants of all descriptions constantly on hand and supplied at Low Figures.

What Stock Can Farmers Raise That Will Pay As Well?

CABASH 11813,

RECORD 2:27 1/2,

Will make the season of 1891, commencing March 1, ending July 1,

AT RIVERBANK, LOCH RAVEN, BALTIMORE CO.

From April 1st to July 1st Cabash will be AT PIMLICO TRACK, from Saturday morning until Monday, 4 P. M., of each week.

Cabash is a beautiful Golden Chestnut, stands 15 3/4 hands, weighs 1125, is perfectly sound, excellent feet and limbs, kind disposition, intelligent and a pleasant game driver. He has never met his equal for beauty and style. He is a pure gaited trotter and imparts style and speed to all his colts.

1—I will give \$200 apiece for colts whose dam is standard bred if she has a record of 2.30 or better.

2—I will give \$300 apiece for colts out of a dam, standard bred, that has produced a colt with a record of 2.30 or better.

3—I will give \$500 apiece for colts out of a dam with a record of 2.30 or better if she has produced a colt with a record of 2.30 or better.

CONDITIONS—The colts to be sired by Cabash. The dams to be constitutionally sound; records must be made in regular races. The colts to be five months old, sound and in thrifty condition. TERMS—\$25 cash with return privilege if mare does not prove with foal.

STANDARD BRED MARES FOR SALE.

G. O. WILSON, Proprietor, Loch Raven, Md.

City Address—104 W. Lexington Street.

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45 sold in '88
2,288 sold in '89
6,268 sold in '90
20,000 will be sold in '91

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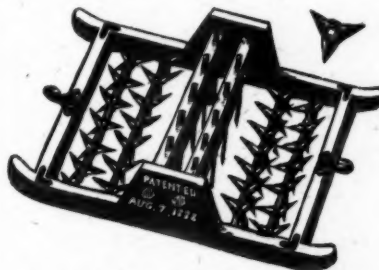
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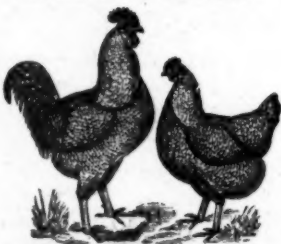
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